Subject index to Volume 20

A

Acetylcholine mobilisable Ca²⁺ (the amount of) in single smooth muscle cells measured with the exogenous cytoplasmic Ca²⁺ buffer, Indo-1 483

Adenocarcinoma (human lung) cell line, P_{2U} purinoceptor modulation of intracellular Ca²⁺ in: down-regulation of Ca²⁺ influx by protein kinase C, 339

Adrenal chromaffin cells (single) of the guinea pig, characteristics of cytosolic Ca²⁺ elevation induced by muscarinic receptor activation in, 303

Adrenocarcinoma (colon) cell lines, calcium-binding protein calretinin-22k, an alternative splicing product of the calretinin gene is expressed in several, 63

Autoantigen La/SSB is a calmodulin-binding protein 493

B

BAPTA and ionomycin, excitation of *Drosophila* photoreceptors by: evidence for capacitative Ca²⁺ entry? 315 Binding proteins (calcium) in normal and transformed cells.

Perugia, May 1996, 87

Binding protein (calcium) calretinin-22k, an alternative splicing product of the calretinin gene is expressed in several colon adenocarcinoma cell lines, 63

Blastomeres (sand dollar): calcium, BOBs, QEDs, microdomains and a cellular decision: control of mitotic cell division in,

BOBs, QEDs, calcium, microdomains and a cellular decision: control of mitotic cell division in sand dollar blastomeres

Bradykinin, Ca²⁺ signaling in endothelial cells stimulated by, Ca²⁺ measurement in the mitochondria and the cytosol by confocal microscopy 53

Buffer systems (calcium), overlooked properties of: a simple method for detecting and correcting stoichiometric imbalance in CaEGTA stock solutions, 227

C

Calcium

calibration curve (non-hyperbolic) of Fura-2: implications for the reliability of quantitative Ca²⁺ measurements, 287 capacitative

entry, evidence for: excitation of *Drosophila* photoreceptors by BAPTA and ionomycin, 315 influx in CFPAC-1 cell, sphingosine-induced inhibition of, 399

chelation of intracellular calcium, prevents cell damage following severe hypoxia in the rat cerebral cortex as studied by NMR spectroscopy ex vivo 509 concentration

measurement, the effects of proteins on: different effects on fluorescent and NMR method, 425 quantification of intraluminal free, in the agonistsensitive internal calcium store using compartmentalized fluorescent indicators: some considerations 235

spatial gradients of cytosolic, in neurones during paradoxical activation by calcium, 373

current, temperature modulates the, of HIT-T15 and mouse pancreatic β-cells, 475

cytosolic concentration

protein phosphorylation and platelet secretion, correlation between, 431

SK&F 96365 inhibits intracellular Ca²⁺ pumps and raises, without production of nitric oxide and von Willebrand factor 501

cytosolic elevation

characteristics of, induced by muscarinic receptor activation in single adrenal chromaffin cells of the guinea pig, 303

gonadotrophs (individual goldfish), spontaneous and gonadotropin-releasing hormone-stimulated, 415

effluxes from the sarcoplasmic reticulum vesicles of frog muscle: effects of cyclopiazonic acid & thapsigargin, 355 entry and the release of intracellular calcium in GH₄C₁

pituitary cells, thimerosal modulates both, 447 entry pathways in MDCK cells, two different store-

operated, 11 homeostasis, modulation of presynaptic, by nitric oxide, 293

influx by protein kinase C, down-regulation of: P_{2U} purinoceptor modulation of intracellular Ca^{2+} in a human lung adenocarcinoma cell line, 339 intracellular

oscillations, glucose-induced, in single human pancreatic islets, 409

sequestration, involvement of mitochondria in, by rat gonadotropes, 515 regulation of, is closely linked to glucose metabolism in

J774 macrophages, 361 release of, and calcium entry in GH₄C₁ pituitary cells,

both modulated by thimerosal, 447 liberation, elementary events of InsP₂-induced, in *Xenopus*

liberation, elementary events of InsP₃-induced, in *Xenopus* oocytes: hot spots, puffs and blips 105

mobilization, recovery from TPA inhibition of receptormediated, is paralleled by down-regulation of protein kinase C-α in CHO cells expressing CCK-A receptor, quantitative measurements, implications for the reliability

of: non-hyperbolic calcium calibration curve of Fura-2, 287

release (quantal) in electropermeabilized SH-SY5Y neuroblastoma cells perfused with *myo*-inositol 1,4,5-trisphosphate 243

release zones (specialized) in chromaffin cells examined with pulsed-laser, 181

Cadmium and nickel, agonist-stimulated calcium transients in PC12 cells are affected differentially by, 441

CaEGTA stock solutions, stoichiometric imbalance in, a simple method for detecting and correcting, 227 Calmodulin-binding protein, autoantigen La/SSB is a, 493 Calmodulin-dependent protein kinase II from bovine cardiac muscle: purification and differential activation by calcium 347

Calreticulin-22k

how many functions in how many cellular compartments? Como, April 1996, 83

calcium-binding protein, an alternative splicing product of the calretinin gene is expressed in several colon adenocarcinoma cell lines, 63

cAMP-dependent and cAMP-independent mechanisms, calcium oscillations in melanotrope cells of Xenopus laevis are differentially regulated by. 329

CCK-A receptor, CHO cells expressing the, recovery from TPA inhibition of receptor-mediated Ca2+ mobilization is paralleled by down-regulation of protein kinase C-α in,

Cerebral cortex (rat), intracellular chelation of calcium prevents cell damage following severe hypoxia in, as studied by NMR spectroscopy ex vivo 509

Chondrocytes (cultured articular), gap junctions mediate intercellular calcium signalling in, 389

Chromaffin cells, specialized release zones in, examined with pulsed-laser, 181

Confocal microscopy, Ca2+ measurement in the mitochondria and the cytosol by: Ca2+ signaling in endothelial cells stimulated by bradykinin:, 53

Cyclopiazonic acid and thapsigargin, effects of, Ca2+ effluxes from the sarcoplasmic reticulum vesicles of frog muscle,

D

Depolarization (fiber) and by cytosolic Ca2+ in skeletal muscle, sarcomeric calcium sparks activated by, 123

E

Epithelial (secretory) cells, Ca2+ signaling in, spatial domains of,

Excitation-contraction coupling in heart: new insights from Ca2+ 129

Fluorescence (time-resolved) of S-100a protein: effect of Ca2+, Mg2+ and unilamellar vesicles of egg phosphatidylcholine 465

Fluorescent and NMR method, the different effects of proteins on [Ca2+] measurement, 425

Fluorescent indicators (compartmentalized), quantification of intraluminal free [Ca] in the agonist-sensitive internal calcium store using, 235

Fura-2, non-hyperbolic calcium calibration curve of: implications for the reliability of quantitative Ca2+ measurements 287

Fura-2, method for measuring sarcoplasmic reticulum calcium uptake in skeletal muscle using,

Gap junctions mediate intercellular calcium signalling in cultured articular chondrocytes, 389

Glucose (hypertonic) impairs glucose-induced increases in cytosol Ca2+ concentration and insulin secretion by HIT-T 15 cells, 273

Glucose metabolism, regulation of intracellular calcium is closely linked to, in J774 macrophages, 361

Glucose-induced [Ca2+], oscillations in single human pancreatic islets, 409

Gonadotropes (rat), involvement of mitochondria in intracellular calcium sequestration by, 515

Gonadotropin-releasing hormone-stimulated and spontaneous, cytosolic calcium rises in individual goldfish gonadotrophs 415

Heart, excitation-contraction coupling in: new insights from Ca2+ 129

HeLa cells, hormone-evoked subcellular Ca2+ signals in

HIT-T 15 cells, hypertonic glucose impairs glucose-induced increases in cytosol Ca2+ concentration and insulin secretion

HIT-T15 and mouse pancreatic β-cells, temperature modulates the Ca2+ current of, 475

Hormone-evoked subcellular Ca2+ signals in HeLa cells (Review), 97

Hypertonic glucose impairs glucose-induced increases in cytosol Ca2+ concentration and insulin secretion by HIT-T 15 cells 273

Hypoxia (severe), intracellular chelation of calcium prevents cell damage following, in the rat cerebral cortex as studied by NMR spectroscopy ex vivo, 509

Indo-1 (the exogenous cytoplasmic Ca2+ buffer), the amount of acetylcholine mobilisable Ca2+ in single smooth muscle cells measured with, 483

InsP,-induced Ca2+ liberation, elementary events of, in Xenopus oocytes: hot spots, puffs and blips 105

InsP₃, quantal calcium release in electropermeabilized SH-SY5Y neuroblastoma cells perfused with myo-inositol 1,4,5trisphosphate 243

Insulin secretion by HIT-T 15 cells, hypertonic glucose impairs glucose-induced increases in cytosol Ca2+ concentration

Ion channels (Ca2+-dependent) in single myocytes from rat portal vein, Ca2+ sparks and Ca2+ waves activate different,

Ionomycin and BAPTA, excitation of Drosophila photoreceptors by: evidence for capacitative Ca2+ entry? 315

Ionomycin induced changes in intracellular free calcium in SH-SY5Y human neuroblastoma cells:sources of calcium and effects on [3H]-noradrenaline release, 21

Laser (pulsed), specialized release zones in chromaffin cells examined with, 181

Macrophages J774, regulation of intracellular calcium is closely linked to glucose metabolism in, 361

MDCK cells, two different store-operated Ca2+ entry pathways

Melanotrope cells of Xenopus laevis, calcium oscillations in, are

- differentially regulated by cAMP-dependent and cAMP-independent mechanisms, $$ 329
- Mg²⁺, Ca²⁺ and unilamellar vesicles of egg phosphatidylcholine, effect of, on time-resolved fluorescence of S-100a protein, 465
- Microdomains and elemental events in calcium signalling (Special issue of collected papers and reviews – Edited by Michael J. Berridge), 95–226
- Microdomains, calcium, BOBs, QEDs, and a cellular decision: control of mitotic cell division in sand dollar blastomeres 161
- Mitochondria, involvement of, in intracellular calcium sequestration by rat gonadotropes 515
- Mitotic cell division (control of) in sand dollar blastomeres: calcium, BOBs, QEDs, microdomains and a cellular decision, 161
- Muscarinic receptor activation in single adrenal chromaffin cells of the guinea pig, characteristics of cytosolic Ca²⁺ elevation induced by, 303
- Muscle (colonic, smooth) cells in culture in culture, propagation of calcium waves between, 257
- Muscle (smooth) cells, in single human myometrium, characterization of an oxytocin-induced rise in [Ca²⁺]_µ 4 Muscle (skeletal)
 - method for measuring sarcoplasmic reticulum calcium uptake in, using Fura-2, 73
 - sarcomeric calcium sparks activated by fiber depolarization and by cytosolic Ca²⁺ in, 123
- Muscle (smooth) cells, transient (spontaneous) outward currents in, 141
- Myocytes (single) from rat portal vein, Ca²⁺ sparks and Ca²⁺ waves activate different Ca²⁺-dependent ion channels in, 153

N

- Neuroblastoma cells, ionomycin induced changes in intracellular free calcium in, sources of calcium and effects on [3H]-noradrenaline release, 21
- Neuroblastoma cells (SH-SY5Y) perfused with *myo*-inositol 1,4,5-trisphosphate, quantal calcium release in electropermeabilized, 243
- Neuronal integration in cerebellar Purkinje neurones, localized Ca^{2+} signalling and, 215
- Neurones, spatial gradients of cytosolic calcium concentration in, during paradoxical activation by calcium, 373
- Neutrophils (human), depletion of calcium stores by thapsigargin induces membrane depolarization by cation entry in, 31
- Nickel and cadmium, agonist-stimulated calcium transients in PC12 cells are affected differentially by, 441
- Nitric oxide and von Willebrand factor, SK&F 96365 inhibits intracellular Ca²⁺ pumps and raises cytosolic Ca²⁺ concentration without production of, 501
- modulation of presynaptic calcium homeostasis by, 293 NMR and fluorescent method, the different effects of proteins on [Ca²⁺] measurement, 425
- NMR spectroscopy ex vivo, intracellular chelation of calcium prevents cell damage following severe hypoxia in the rat cerebral cortex as studied by, 509
- Noradrenaline release, ionomycin induced changes in intracellular free calcium in SH-SY5Y human neuroblastoma cells:sources of calcium and effects on, 21

Nuclear (Ca²⁺) versus perinuclear and cytoplasmic in osteoclasts, 381

0

- Oscillations (calcium) in melanotrope cells of *Xenopus laevis* are differentially regulated by cAMP-dependent and cAMP-independent mechanisms, 329
- Osteoclasts, nuclear versus perinuclear and cytoplasmic calcium in, 381
- Oxytocin-induced rise in [Ca²⁺]i, characterization of an, in single human myometrium smooth muscle cells, 43

P

- Pancreatic (single human) islets, glucose-induced [Ca²⁺], oscillations in, 409
- Pancreatic β-cells (mouse), temperature modulates the Ca²⁺ current of HIT-T15 and, 475
- Phosphatidylcholine (egg), unilamellar vesicles of, Ca²⁺ and Mg²⁺, effect on time-resolved fluorescence of S-100a protein, 465
- Phosphoglucomutase: identification of an S100A1/S100B target protein, 279
- Photo-receptors (*Drosophila*), excitation of, by BAPTA and ionomycin: evidence for capacitative Ca²⁺ entry? 315
- Pituitary (GH₄C₁) cells, thimerosal modulates both calcium entry and the release of intracellular calcium in, 447
- Platelet secretion and protein phosphorylation, correlation between cytosolic Ca²⁺ concentration, 431
- Preface to special issue, 95
- Presynaptic calcium homeostasis by nitric oxide, modulation of, 293
- Protein kinase C, down-regulation of Ca^{2+} influx by: P_{2U} purinoceptor modulation of intracellular Ca^{2+} in a human lung adenocarcinoma cell line, 339
- Protein kinase C- α in CHO cells expressing the CCK-A receptor, recovery from TPA inhibition of receptor-mediated Ca^{2+} mobilization is paralleled by down-regulation of, 1
- Protein kinase II (calmodulin-dependent) from bovine cardiac muscle: purification and differential activation by calcium 347
- Protein phosphorylation and platelet secretion, correlation between cytosolic Ca²⁺ concentration, 431
- Proteins, the effects of, on [Ca²⁺] measurement: different effects on fluorescent and NMR method, 425
- Pumps (calcium), SK&F 96365 inhibits intracellular, and raises cytosolic Ca²⁺ concentration without production of nitric oxide and von Willebrand factor 501
- Purinoceptor (P_{2U}) modulation of intracellular Ca^{2+} in a human lung adenocarcinoma cell line: down-regulation of Ca^{2+} influx by protein kinase C, 339
- Purkinje neurones (cerebellar) localized Ca²⁺ signalling and neuronal integration in, 215

c

QEDs, calcium, BOBs, microdomains and a cellular decision: control of mitotic cell division in sand dollar blastomeres, 161

R

Receptor-mediated Ca2+ mobilization, recovery from TPA

inhibition of, is paralleled by down-regulation of protein kinase C-α in CHO cells expressing the CCK-A receptor, 1

- S-100a protein, time-resolved fluorescence of: effect of Ca2+, Mg2+ and unilamellar vesicles of egg phosphatidylcholine 465
- S100 gene cluster on chromosome 1q21, a new member of the, characterization of the human \$100A12 (calgranulin C, p6, CAAF1, CGRP) gene, 459
- S100A1/S100B target protein, identification of an: phosphoglucomutase, 279
- Sarcoplasmic reticulum vesicles, Ca2+ effluxes from the, of frog muscle: effects of cyclopiazonic acid and thapsigargin 355

Signalling (calcium) endothelial cells

stimulated by bradykinin: Ca2+ measurement in the mitochondria and the cytosol by confocal microscopy, 53

spatial domains of, 203

- microdomains and elemental events in (Special issue of collected papers and reviews - Edited by Michael J. Berridge), 95-226
- (localized), and neuronal integration in cerebellar Purkinje neurones, 215
- gap junctions mediate intercellular, in cultured articular chondrocytes, 389
- Signals (calcium), hormone-evoked subcellular, in HeLa cells (Review), 97
- Sparks, calcium (sarcomeric), activated by fiber depolarization and by cytosolic Ca2+ in skeletal muscle 123
- Sparks (calcium) and Ca2+ waves activate different Ca2+dependent ion channels in single myocytes from rat portal vein 153
- Stores (calcium), depletion of, by thapsigargin induces membrane depolarization by cation entry in human neutrophils, 31
- SK&F 96365 inhibits intracellular Ca2+ pumps and raises cytosolic Ca2+ concentration without production of nitric oxide and von Willebrand factor 501
- Sphingosine-induced inhibition of capacitative calcium influx in CFPAC-1 cell, 399
- Stoichiometric imbalance in CaEGTA stock solutions, a simple method for detecting and correcting, 227

Store-operated Ca2+ entry pathways in MDCK cells, two different, 11

- Temperature modulates the Ca2+ current of HIT-T15 and mouse pancreatic β-cells, 475
- Thansigargin and cyclopiazonic acid, effects of, Ca2+ effluxes from the sarcoplasmic reticulum vesicles of frog muscle,
- Thapsigargin, depletion of calcium stores by, induces membrane depolarization by cation entry in human neutrophils 31
- Thimerosal modulates both calcium entry and the release of intracellular calcium in GH₄C, pituitary cells, 447
- TPA inhibition, recovery from, of receptor-mediated Ca2+ mobilization is paralleled by down-regulation of protein kinase C-α in CHO cells expressing the CCK-A receptor,
- Transient (spontaneous) outward currents in smooth muscle
- Transients, calcium, (agonist-stimulated) in PC12 cells are affected differentially by cadmium and nickel 441

Uptake (calcium), sarcoplasmic reticulum, method for measuring in skeletal muscle using Fura-2, 73

von Willebrand factor and nitric oxide, SK&F 96365 inhibits intracellular Ca2+ pumps and raises cytosolic Ca2+ concentration without production of, 501

Waves (calcium), propagation of, between colonic smooth muscle cells in culture, 257

Xenopus oocytes, elementary events of InsP3-induced Ca2+ liberation in: hot spots, puffs and blips

Author index to Volume 20

A

Agell N, 493 Arnaudeau S, 153 Asano T, 303 Ashley CC, 355

В

Bachs O, 493
Benters J, 441
Berridge MJ, 95
Beyersmann D, 441
Blatter LA, 43
Blinks JR, 227
Boittin FX, 153
Bolsover SR, 373
Bolton TB, 141
Bootman MD, 97
Börner C, 293
Bourguignon LYW, 53
Bustos-Castillo M, 63

C

Caddell G, 279
Carrion-Vazquez M, 181
Castro A, 493
Cavazzoni M, 399
Celio M, 63
Cesaro L, 431
Cetinsoy C, 287
Cheng H, 129
Chessher J, 279
Choi J, 105
Clunes MT, 339

D

D'Andrea P, 389
Dalla Via L, 431
Darbha S, 361
David-Dufilho M, 501
De Pont JJHHM, 1
Deana R, 431
Devynck M-A, 501
Dietl P, 11
Donnadieu E, 53
Du G-g, 355

E

Eilers J, 215 Ennes HS, 257 Enrico Gratton E, 465

F

Faura M, 493 Fernandez JM, 181 Ferrier J, 381 Foder B, 31 Friedrich F, 11

G

Gander J-C, 63
Ganitkevich VYa, 483
Garner KM, 1
Giambanco I, 465
Giovanna Curatola G, 465
Giovanna Zolese G, 465
Golard A, 515
Gómez AM, 129
Gröhn O, 509
Guthrie PB, 373

H

Haller T, 11
Hardie RC, 315
Hargreaves M, 73
Hashimoto K, 425
Hechtenberg S, 441
Hehl S, 515
Heizmann CW, 459
Hendriks M, 1
Hendriks W, 1
Henke W, 287
Hille B, 515
Hofer AM,
Holda JR, 43
Hunziker W, 63

ı

Imaizumi Y, 141 Iouzalen L, 501 Ito S, 303

J

Jenks BG, 329 Jung K, 287

K

Kah O, 415 Kaila K, 447 Kakkar R, 347 Karhapää L, 447 Kashima K, 273 Kater SB, 373 Kauppinen R, 509 Kemp PJ, 339 Kinard TA, 475 Kitamura N, 303 Klabusay M, 227 Klein MG, 123 Konnerth A, 215 Krause K-H, 83 Kusuoka H, 425

1

Lakatta EG, 129 Landar A, 279 Lantoine F, 501 Lea TJ, 355 Lederer MR, 129 Lederer WJ, 129 Lennon VA, 181 Lieste JR, 329 Loening S, 287

M

Macrez-Lepretre N, 153
Marchase RB, 361
Marenholz I, 459
Martín F, 409
Martínez-Serrano A, 293
Matsuda S, 425
Mayer EA, 257
Meldolesi J, 83
Michalak M, 83
Millanvoye-Van Brussel E, 501
Mironneau J, 153
Mischke D, 459
Mollard P, 415
Mori M, 273

N

Nahorski SR, 243 Nakazato Y, 303 Nishimura T, 425

0

Oberti C, 43 Ohta T, 303 Orlati S, 399

P

Parker I, 105 Peacock MD, 1 Pereira R, 293 Perez-Reyes E, 43 Pernollet M-G, 501 Plant T, 215 Purkiss JR, 21

R

Raju RVS, 347 Renau-Piqueras J, 493 Roberto Staffolani R, 465 Robinson IM, 181 Rosario Donato 465 Roubos EW, 329 Rugolo 399

S

Satin LS, 475
Sato N, 273
Satrústegui J, 293
Scapin M, 431
Schäfer BW, 459
Schäfer T, 441
Scharff O, 31
Scheenen WJJM, 329
Schneider MF, 123

Schulz I, 235 Schwaller B, 63 Sharma RK, 347 Shimizu H, 273 Sihver RB, 161 Smeets RLL, 1 Soria B, 409 Spurgeon H, 129 Stimaniglio M, 431 Strupish J, 243 Stüber D, 63

т

Thorn P, 203 Titievsky A, 447 Törnquist K, 447 Tsujimura E, 425

V

van Emst-de Vries SE, 1 Villalba M, 293 Vittur F, 389

W

Warmington SA, 73 Wicki R, 459 Wilcox RA, 243
Willars GB, 21
Willems PHGM, 1
Willems PHGM, 329
Williams DA, 73
Williams RJP, 87
Wirleitner B, 11

X

Xiao R-P, 129

Y

Yamada M, 181 Yao Y, 105 Young SH, 257 Yu H, 381

Z

Zhou Y-Y, 129 Ziman B, 129 Zimmer DB, 279

